

AC-DC Converter

Model Number: THRSLADC1001

Overview

The **AC-DC Converter** is a ruggedized power supply module designed to deliver regulated **24V DC output** from a standard **230V AC input**. It is built to meet stringent defense and industrial standards, ensuring reliable performance under harsh conditions.

With a compact footprint, fanless operation, and robust protection features, it has been **supplied to DRDO Pune R&DE and Indian Air Force (IAF)**, proving its field performance in mission-critical deployments.

Technical Specifications

Parameter	Specifications
Input Voltage	230V AC $\pm 10\%$
Input Frequency	50 Hz $\pm 10\%$
Output Voltage	24V DC $\pm 2\%$
Output Current	6A max
Output Power	150W
Efficiency	$\geq 80\%$
Ripple & Noise	≤ 200 mV (p-p)
Protection	Over-voltage, Over-current, Short-circuit
Cooling	Natural convection (fanless)
Dimensions	(Insert actual size if provided)
Weight	(Insert actual weight if provided)
Operating Temperature	-20°C to +55°C

Key Features

- Converts **230V AC mains** to regulated **24V DC**
- Compact, rugged, and fanless design for harsh environments
- Built-in **OVP, OCP, and short-circuit protection**
- High reliability with efficiency $\geq 80\%$
- Proven in **defense programs including DRDO Pune R&DE and IAF**
- IP65-rated for dust and water protection

Applications

- Powering controllers, sensors, and communication modules
- Defense-grade vehicle and command systems
- Industrial automation and process control equipment
- UAV/UGV/ROV auxiliary systems



Note

The **AC-DC Converter** is part of **THRSL's standard technology suite**, designed for **plug-and-play deployment** across industries. Its proven supply to **DRDO Pune R&DE and Indian Air Force (IAF)** demonstrates its dependability in mission-critical environments.

Custom versions can be designed with higher power ratings, alternate output voltages, or specific connector types.